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March 15, 2017

**Ex Parte**

Ms. Marlene H. Dortch  
Secretary  
Federal Communications Commission  
445 12<sup>th</sup> Street, SW  
Washington, DC 20554

**Re: Amendment of Parts 1 and 22 of the Commission's Rules with Regard to the Cellular Service, Including Changes in Licensing of Unserved Areas, WT Docket No. 12-40; Promoting Technical Solutions to Combat Contraband Wireless Device Use in Correctional Facilities, GN Docket No. 13-111**

Dear Ms. Dortch:

On March 13, 2017, Tamara Preiss and Andy Lachance of Verizon met separately with Erin McGrath, legal advisor to Commissioner O'Reilly, and Rachael Bender, legal advisor to Chairman Pai, to discuss the above-referenced proceedings. On March 14, Ms. Preiss, Mr. Lachance, and Scott Townley of Verizon spoke by telephone to the following Wireless Bureau staff about the cellular power order: Roger Noel, Linda Chang, Tom Derenge, Keith Harper, Moslem Sawaz, and Nina Shafran.

*Cellular Power Limit Proceeding*

We discussed Verizon's support for the power spectral density ("PSD") limits in the draft order: 400 W/MHz in urban areas and 800 W/MHz in rural areas, increasing up to 1000 W/MHz (urban) and 2000 W/MHz (rural) if the licensee does not exceed power flux density ("PFD") limits. These limits strike the appropriate balance between enabling licensees to deploy broadband technologies in the cellular band without losing coverage and protecting adjacent public safety users from interference. We also support the proposed change to the cellular discontinuation rule to allow cellular licensees to discontinue service for up to 180 days to implement new technologies in the band. We urged adoption of the order at the Commission's March 23 meeting.

We proposed two technical changes to the draft order. First, we asked that the proposed rule change to Section 22.911(c), which determines how cellular licensees should calculate service area boundaries ("SABs") when using PSD, be further amended to change the proposed 32 dBuV/m contour to "32 dBuV/m/MHz contour." Absent this change, the propagation modeling techniques used to determine the SAB boundaries will overstate coverage – meaning that areas will be deemed covered and part of the protected license area when there is in fact no reliable network coverage. In engineering terms, 32 dBu is a signal level well below that at which LTE can provide reliable service. Consider, for

example, a 10 MHz carrier: at 32 dBu the channel power spectral density is -104 dBm/10 MHz or -174 dBm/Hz. The thermal noise floor of a typical device is -166 dBm/Hz. The resultant signal-to-noise ratio is -8 dB, which is well below the level required for reliable network access.

Second, we asked that the existing cellular field strength limit in Section 22.983(a) of 40 dBuV/m field strength limit be changed to reflect a PSD environment. The amended rule would divide the existing field strength limit by channel bandwidth (in MHz) to produce a limit of “40dBuV/m/MHz.” Failure to make this change will require licensees using PSD to exceed the field strength limit at the market boundary to provide reliable service, because service at the market boundary under the current rule will be only marginally reliable. As a result, licensees will need to negotiate many more extension agreements to provide reliable coverage at market boundaries.

### *Contraband Device Proceeding*

We discussed our support for the licensing changes in the proposed order, with two minor changes.

First, we asked for ten days (rather than five days) for CMRS providers to submit a written response to a complaint from a contraband interdiction system (CIS) provider that the CMRS provider did not negotiate a lease in good faith. We noted that the draft order states (at paragraph 62) that there have been no material problems with CMRS provider lease negotiations. We asked for an additional five days to allow carriers adequate time to investigate the allegations in the complaint and draft a response.

Second, we asked for a change to the spectrum manager lease rule – Section 1.9020(d)(8) -- that requires the lessor (in this case, the CMRS provider) to comply with Commission E911 requirements. We asked that this rule be changed to state, “when a CIS provider leases spectrum, the CIS lessee is solely responsible under new rule section 22.18(r).” This change is necessary because the draft order includes a rule (new rule 20.18(r)) requiring the CIS provider lessor not to pass 911 calls to the public safety answering point (“PSAP”) if the PSAP informs the CIS provider it does not wish to receive 911 calls. Absent this rule change, CMRS providers could be deemed in violation of rule 1.9020(d)(8) when the CIS provider is asked not to pass 911 calls to the PSAP.

This letter is being filed pursuant to Section 1.1206 of the Commission’s Rules. Should you have any questions, please contact the undersigned.

Sincerely,



cc:	Rachael Bender	Tom Derenge
	Erin McGrath	Keith Harper
	Roger Noel	Moslem Sawaz
	Linda Chang	Nina Shafran